

Solomon Islands Government



Information & Communication Technology (ICT) Minimum Procurement Standards

1st March 2012 (Validity 3 months)

The following minimum ICT standards have been introduced to assist Solomon Island Government's Ministries and Departments in procuring ICT equipment. The standards will ensure that the equipment specifications are:

- ✓ Technically complete
- ✓ Fit for Purpose
- ✓ Sustainable over the estimated lifetime of the equipment
- ✓ Maintainable over the estimated lifetime of the equipment

Please contact the Information Communications Technology Support Unit (ICTSU) on 24580/27668 or email it@mof.gov.sb if you have any queries regarding these minimum ICT standards.

IMPORTANT Notice

Any vendors who delivers equipment, software or services that are non-compliant with these minimum standards three times (3) in a row will be excluded from the provision of any equipment, software or services to SIG for a minimum period of six (6) months.

All equipment and software delivery for SIG must be done thru the ICT Support Unit office which is located on the 4th Floor Anthony Saru Building, for auditing and tagging against a check list refer (Page 11). Vendors must also note, that the release of any payment is determined by full delivery in compliance with these standards and specifications.

Any New vendors as of 2012 who wish to provide ICT related services or supply ICT equipment to SIG must fill in the SIG ICT Supplier information form. This form can be obtained from ICTSU office, 4th floor Anthony Saru building, the provision of providing ICT equipment, software or services to SIG can be granted upon satisfactory of information provided in this form. Copy of this form is found on page 12.

1) Generic Standards.

- 1.1 All ICT equipment must be provided with a suitable Hardware Maintenance Contract that includes a 3 year ON-SITE hardware and labor maintenance (a warranty is not considered adequate). The maintenance contract is to guarantee the repair or replacement of all faulty hardware within 5 working days or the fault being reported to the vendor. The initial inspection and fault diagnosis is to be carried out within 1 working day.
- 1.2 All motherboard/Hardware Drivers must be installed.
- 1.3 MS windows and MS Office software Activated.
- 1.4 All software product Keys, Documentation and media MUST be surrendered to SIG ICT SU, 4th Floor Anthony Saru Building.
- 1.5 SIG will accept only BRAND equipment. All desktops and laptops Supplied must be NEW (refurbished or second hand computers will not Be accepted).
- 1.6 ALL hardware drivers and application software must have 64bit versions supplied.

2) Desktops.

2.1 Hardware minimum Technical Specification

- Minimum 2.0 GHz Dual Core or Quad processors or latest CPU
- Minimum 2GB of RAM
- Minimum 250GB Hard disk
- DVD-ROM drive
- USB keyboard and mouse
- 240V ATX Power supply unit
- Minimum 1GigMbps network card
- Minimum 3 USB 2.0 slots
- 1 x 5.25" expansion bay
- UPS (min.650VA) with surge protection

2.2 Minimum Software Requirements for Desktops.

- Licensed Windows 7 Professional 64bit
- Licensed MS Office 2010 professional 64bit

3) Monitors.

- Minimum 17" LCD (with VGA and HDMI cable)
- 240V Power rating.

4) Laptops.

4.1 Hardware Minimum Technical Specification.

- Minimum 1.2 GHz CPU. Intel Pentium Dual or Quad core or AMD equivalent CPU
- Minimum 2GB RAM.
- Minimum 250GB Hard disk
- Minimum 13" TFT Active Matrix screen
- DVD Rom
- SD/MMC card slot
- 1*Type II PC card slot
- 3 * USB 2.0 slots
- 100/1000mbps network adapter
- Integrated 802.11 b/g/n/a wireless adapters
- 240V surge protection device (minimum of 4port.i.e Belkin inline surge protector)
- USB mouse
- Carry bag
- Laptop/Notebook LOCK (e.g. Kensington lock)

4.2 Minimum Software Requirements for Laptops;

- Licensed Windows 7 Professional 64bit version
- Licensed MS Office 2010 Professional 64bit version

5) Servers.

Pre-requisite for the purchase of a server is a fully completed network configured and cabled according to the required standards.

Each server must be individually sized depending on the usage and applications to be deployed. Please contact the ICTSU for advice when procuring any servers. All new servers are to be Rack mounted (or Blade Servers) and mounted into a suitable Server Rack.

Software used or purchased for use on any server must be fully licensed and the original software media must be provided to the ICTSU for safe keeping. SIG recommends that the MS Windows Server 2008 R2 or latest software be purchased with all servers.

The notes below form a minimum generic specification for servers and many other technical factors need to be adjusted on a case by case basis:

| Component | Requirement |
|-------------------------|---|
| Processor | Minimum: 1.4 GHz (x64 processor) Note: An Intel Itanium 2 processor is required for Windows Server 2008 for Itanium-Based Systems |
| Memory | Minimum: 2 GB RAM Maximum: 8 GB (Foundation) or 32 GB (Standard) or 2 TB (Enterprise, Datacenter, and Itanium-Based Systems) |
| Disk Space Requirements | Minimum: 32 GB or greater Foundation: 10 GB or greater Note: Computers with more than 16 GB of RAM will require more disk space for paging, hibernation, and dump files |
| Display | Super VGA (800 × 600) or higher resolution monitor |
| Other | DVD Drive, Keyboard and Microsoft Mouse (or compatible Pointing device) |
| Power Supply | Dual 240volts |

Full justification has to be provided to ICTSU for any exception to this requirement.

6) Photocopier.

All photocopy requirements must have an option to be connected to a network.

Please contact the ICTSU for advice when procuring photocopying equipment.

7) Printers.

All printers must have an inbuilt Ethernet network interface card. **Printers purchased for SIG Provincial offices MUST have in built Ethernet network interface.** Please consult ICT SU for any queries.

Note: Toner printers are strongly recommended for purchase because of its long term economic value.

7.1 Low-end black and white printer

Minimum technical specification:

- Ethernet enabled
- Front panel or LCD screen
- Black toner only

- Duty Cycle less than 2,500 pages per month
- No scanning functions
- No duplex unit
- Driver support: Window XP, Vista 32 & 64 bit, Windows 7 32 & 64 bit, Server 2008 32 and 64 bit
- No photocopy function

7.2 Mid-range black and white printer

Minimum technical specification:

- Ethernet enabled
- Front panel or LCD screen
- Black toner only
- Duty Cycle more than 10,000 pages per month and less than 20,000 pages per month
- No scanning functions
- Includes a duplex unit
- Driver support: Window XP, Vista 32 & 64 bit, Windows 7 32 & 64 bit, Server 2008 32 and 64 bit
- No photocopy function

7.3 High-end black and white printer

Minimum technical specification: Ethernet enabled

- Front panel or LCD screen
- Black toner only
- Duty Cycle greater than 20,000 pages per month
- No scanning functions
- Includes a duplex unit
- Driver support: Window XP, Vista 32 & 64 bit, Windows 7 32 & 64 bit, Server 2008 32 and 64 bit
- • No photocopy function

7.4 Mid-range multifunction (Printer, Copier, Scanner)

Minimum technical specification: Ethernet enabled

- Front panel or LCD screen
- Black toner only
- Duty Cycle more than 10,000 pages per month and less than 20,000 pages per month
- Scan to e-mail and fileshare. Multi-page scan.
- Output to jpg and pdf format
- Includes a duplex unit
- Driver support: Window XP, Vista 32 & 64 bit, Windows 7 32 & 64 bit, Server 2008 32 and 64 bit
- With Photocopying functionality

8) Software Development.

8.1 Requirement Specs:

Any Ministry requiring software development is to develop a comprehensive set of functional requirements specifications to be included in the request for quotation (RFQ) or request for tender (RFT). The ICTSU can provide advice on how to develop a set of functional requirements, on request.

8.2 Acceptance testing:

Any Ministry requiring software development is to develop a set of acceptance tests prior to acceptance testing. The ICTSU can provide advice on how to develop acceptance tests, on request. After the tests are done the developer must provide the documentation, user guide and training for the user.

8.3 Payments for software development:

Any software development contract or agreement made should be fixed price basis and payments are to be made based on pre-determined agreed deliverables.

Before the final payment is made the developer must hand over all the intellectual property and source code to SIG as well as the user guide and all other documentation.

Three (3) year on-site support and maintenance must be provided by the developer. The Ministry is to ensure that full user training is provided to all relevant SIG personnel by the developer prior to payment being made for the training.

9) Networking Equipment

9.1 Switch

All new network switches must be a HP Procurve Layer 2/3 switch or have remote management capabilities.

9.2 Cabling.

Cabling contractors must have a valid Cabler registration certification from a recognized certification institution.

Names of authorized cablers and their respective certification can be obtained from the SIG ICT Support Unit. SIG will only engage contractors who are certified to carry out structured CAT5/6 network cabling work.

All network cabling and cabling installation is to meet Category 5e standards fully. The Do's and Don'ts are presented in attachment A to assist in achieving this aim. All data cabling installations are to be fully documented with data cabling diagrams that show the physical location of the cable runs within the building or between buildings.

Please contact the SIG ICT-SU for advice when procuring any networking equipment or cabling (LAN).

See Attachment A: Category 5E Installation. Do's and Don'ts.

Attachment A: Category 5E Installation. Do's and Don'ts.

| | |
|--------|---|
| Do | Run all cables in a "Star" configuration. That is to say that they all emanate from, and are "homerun" to, one central location, known as the wiring hub. Visualize a wagon wheel, all of the spokes; start from on central point, known as the hub of the wheel. |
| Do | Keep all cable runs to a maximum of 90 meters (for each run). |
| Do | Maintain the twists of the pairs all the way to the point of termination, or no more than 1.3cm untwisted |
| Do Not | Skin off more than 2.5cm of jacket when terminating |
| Do | Make gradual bends of the cable, where necessary. Radius No sharper than a SI 50 Cents coin. |
| Do Not | Allow the cable to be sharply bent, or kinked, at any time. This can cause permanent damage to the cables' interior. |
| Do | Dress the cables neatly with cable ties. Use low to moderate pressure. |
| Do Not | Over tighten cable ties. We recommend Hook and Loop (Velcro) Cable Ties for commercial installations. |
| Do | Cross-connect cables (where necessary), using cat 5E rated punch blocks and components. |
| Do Not | Splice or bridge category-5E cable at any point. There should never be multiple appearances of category 5E cable. |
| Do | Use low to moderate force when pulling cable. |
| Do Not | Use excessive force when pulling cable. |
| Do | Use cable pulling lubricant for cable runs that may otherwise require great force to install. (You will be amazed at what a difference the cable lubricant will make) |
| Do Not | Use oil, or any other lubricant, not specifically designed for cable pulling. Oil, or other lubricants, can infiltrate the cable, causing damage to the insulation. |
| Do | Keep cat 5E cables as far away from potential sources of EMI (electrical cables, transformers, light fixtures, etc.) as possible |
| Do Not | Tie cables to electrical conduits, or run cables within or along electrical conduit, or lay cables on electrical fixtures. |
| Do | Install proper cable supports, spaced no more than 1.5 meters apart. |
| Do Not | Install cable that is supported by the ceiling tiles (this is unsafe, and is a violation of the building codes). |
| Do | Always label every termination point . Use a unique number for each cable segment. The idea here, is to make moves, adds, changes, and troubleshooting as simple as possible. |
| Do | Always test every installed segment with a cable tester . "Toning" alone, is not an acceptable test. |

| | |
|--------|--|
| Do | Always install jacks in such a way as to prevent dust and other contaminants from settling on the contacts. The contacts (pins) of the jack should face up on flush mounted plates, or left, right, or down (never up) on surface mount boxes. |
| Do | Always leave extraa slack on the cables, neatly coiled up in the ceiling or nearest concealed place. It is recommended that you leave at least 1.5 meters at the work outlet side, and 3 meters at the patch panel (wiring hub) side. |
| Do Not | Never install cables "taught" in the ceiling, or elsewhere. A good installation should have the cables loose, but never sagging. |
| Do | Always use grommets to protect the cable where passing through metal studs or anything that can possibly cause damage to them. |

| | |
|-------------------------|---|
| Do | Choose either 568A or 568B wiring standard, before you begin your project. Wire all jacks and patch panels for the same wiring scheme (A or B). |
| Do Not | Mix 568A and 568B wiring on the same installation. |
| Do Not (1 exception) | Use staples on category-5E cable that crimp the cable tightly. The common T-18 and T-25 cable staples are not recommended for category 5E cable. The T-59 insulated staple gun is ideal for fastening cat5 & 6 and fiber optic cabling as it does not put any excess pressure on the cable. |
| Do | Always obey all local, and national, fire and building codes. Be sure to "fire stop" all cables that penetrate a firewall. Use plenum rated cable where it is mandated. |

Notes and Explanations for Do's and Don'ts

Think of a category 5E cable segment as an extension cord to extend a network hub port to a remote location. Since we do not permanently connect it to a live source, and all of the segments are wired "straight through", that is basically what it is (a data extension cord). If all of the computers and devices were located reasonably close to the hub, we would be able to connect them to the hub ~~directly~~, with patch cables. In ~~most~~ cases, this would ~~not~~ be practical, so we install cable segments to distribute the hub ports to the remote locations in an organized manner.

Ideally, the data extension cord that we install, should smoothly pass the data, from one end to another without altering, the signal (transmitted from device to device) in any way. Consider this fact to be Rule #1, and is perhaps the most important statement that we can make. There are many very technical issues concerning UTP cabling. No matter how technical, these issues all boil down to ~~that one simple fact~~. You would probably need an Electrical engineering degree to fully understand all of the theories that go into transmitting data over UTP cabling. All that you need to know as an installer is a few simple facts, or do's and don'ts. It is ~~really~~ no more complicated than that. Almost all of the rules (do's and don'ts) above are designed to adhere to Rule #1. The others are necessary to promote a neat, orderly, safe and professional installation.

Routing and ducting of cables

The requirements of this Clause are intended to minimize the induction of power and noise signals onto data communication and telecommunication cables, which could result in data corruption.

Data communication and telecommunication cables shall be routed in relation to power cables (f or computer equipment, lighting, air-conditioning or any other purpose) or related equipment, to avoid induced interference. The guide for achieving this is set out as follows:

- (a) The minimum separation distance between such cables or their related equipment shall be no less than the distances given in Table 3.1.

Table 3.1 Separation Between power and Data cable.

| Criteria Ratio | Unshielded Power Cable | Shielded Power Cables |
|----------------|------------------------|-----------------------|
| KVA | mm | mm |
| ≤1 | 300 | 25 |
| >1 ≤2 | 400 | 50 |
| >2 ≤5 | 650 | 150 |
| > 5 | 1,500 | 300 |

Where it is necessary for power and data communication cables to cross, they may do so at less than the above required distance provided that the maximum available separation is observed and that the cables cross only at right-angles, with straight sections on each side of the crossing point. The minimum straight length shall be the difference between the appropriate distances listed above and the distance between the two cables at cross-over.

- (b) Data communication cables shall not be laid in the same duct as power or other conductors, as specified above, with less than the above separation unless electrically separated by a screen which is connected to the safety earth system.

NOTE: Routing one group or the other through a metal conduit, earthed as specified, will satisfy this requirement.



SOLOMON ISLANDS
GOVERNMENT

ICT Support Unit
Ministry of Finance & Treasury
P O Box 26
Honiara, Solomon Islands
Phone: (677) 24580/24575

March 13, 2012

STANDARD SIG ICT PURCHASE CHECKLIST (To be completed before Payment)

Requisition NO: _____ **IT Supplier:** _____ **Ministry:** _____ **Department:** _____
SIG Audit: _____
Quote Validation: _____

| | | | | |
|------------------------|--------------------|------------|------------|---------------------|
| Scanned Document Name: | Hard Cat Asset No: | Item type: | Item cost: | Preferred supplier: |
| | | | | |

Comments/Remarks

Quote specification has been checked against technical standard by the ICT Support Unit. The quote is (Please circle):

COMPLIANT

NONCOMPLIANT

Please proceed to issue LPO

Request supplier to resubmit valid quote

Stamp

AUDIT CHECK.

Audit Location:

Audit Date: / /

| | |
|--|--|
| Task: Audit Checklist | Status: <input checked="" type="checkbox"/> or <input type="checkbox"/> |
| Name of the preferred supplier | |
| Supply matches the specification on the quote supplied by the preferred supplier for Hardware | |
| Supply matches the specification on the quote supplied by the preferred supplier for software. | |
| Asset Tags/Label # | |

Comments/Remarks: _____

COMPLETE

INCOMPLETE

Please Proceed with payment

Please withhold payment.

Auditing Staff: _____

Name: _____

Authorising Manager: _____

Name: _____

Stamp

SUPPLIER INFORMATION FORM

Request for Supply of IT Equipment to SIG

Name of Supplier: _____

Address: _____

Name of Contact: _____
Position of Contact: _____
Email of Contact: _____
Telephone of Contact: () _____

Signature of Supplier's Authorised Officer

Dated this day of 20

| | |
|--------------|--------------------|
| Signature | In the capacity of |
| | |

Duly authorized to sign Bid for and on behalf
of.....

(INSERT COMPANY STAMP)

Note to Supplier:

The Contact Person shall be a person who is easily contactable via telephone, facsimile or e-mail to answer queries in relation to supply of ICT goods on a day-to-day basis.

Suppliers shall provide the information outlined below.

| Details of Supplier | |
|--|--|
| Full legal name: | |
| Trading or business Name: | |
| Tax Identification Number: | |
| Address: | |
| If a company (in addition to the above) | |
| Date and place of incorporation: | |
| Individual shareholders holding 20% or more of any issued share capital of the Bidder: | |

| | |
|--|---|
| 1 | Executive Summary |
| Supplier shall provide a brief Executive Summary of their business. | |
| | |
| 2 | Ability and Capacity to Supply Whole of Government |
| ICT supplier shall provide details of the organization's ability and capacity to supply the goods or services to the whole of government. | |
| ICT supplier shall also provide details of its business including: | |
| <ul style="list-style-type: none"> a. Number of employees and contacts; b. Names and experience of key personnel; c. Details of any shop fronts operated including the location and length of operation in this location. | |
| 3 | Relevant experience |
| Supplier shall provide details of past and current customers to whom similar goods or service have been provided (eg. including names of customers, contract values etc) | |
| | |

